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| APPLICATION NO. W | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-------------|----------------------|-------------------------|-------------------------|--|
| 10/033,397 | 12/27/2001 | Hiromi Yatsuda | 5622DIV | 9918 | |
| 7590 08/05/2003 Samuels, Gauthier & Stevens LLP Suite 3300 225 Franklin Street | | | | *:** . | |
| | | | EXAMINER | | |
| | | | WILCZEWSKI, MARY A | | |
| Boston, MA 02110 | | | ART UNIT | PAPER NUMBER | |
| • | | | 2822 | | |
| | | | DATE MAILED: 08/05/2003 | DATE MAILED: 08/05/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| J. | Application No. Applicant(s) | | | | | | |
|---|--|---|--|--|--|--|--|
| Office Action Comment | 10/033,397 | YATSUDA, HIROMI | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| The MAILING DATE of this communication appe | Mary Wilczewski | 2822 | | | | | |
| Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) day: ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | | |
| 1) Responsive to communication(s) filed on 31 N | larch 2003 and 12 May 2003 . | | | | | | |
| 2a) ☐ This action is FINAL. 2b) ☑ Thi | s action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | ex parte quayre, 1000 C.D. 11, 4 | 700 O.G. 210. | | | | | |
| 4) Claim(s) 13-20 is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6) Claim(s) <u>13,15-17,19 and 20</u> is/are rejected. | | | | | | | |
| 7) Claim(s) <u>14 and 18</u> is/are objected to. | 7) Claim(s) 14 and 18 is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>27 December 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a)⊠ All b) Some * c) None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No. <u>09/583,382</u> . | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal | y (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | | |

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DETAILED ACTION

This Office action is in response to Amendment B filed on 31 March 2003and Supplemental Amendment C filed on 12 May 2003.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13, 15, 16, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al., U.S. Patent 6,077,757, newly cited, in view of Morishima, US 2001/0011857, of record.

Mizuno et al. disclose a method of manufacturing an electronic component to be mounted on a circuit board comprising forming an electronic circuit device 15 and an electrode pad 16 on one main surface of a first substrate 14, adhering a second substrate to the first substrate, forming a plurality of holes in the second substrate at sites confronting the plurality of electrode pads, forming a bump electrode 21 in each of the plurality of openings in the second substrate, and severing the electronic elements to obtain a plurality of electronic components, see figures 7A-7F. Mizuno et al. lack anticipation only of forming a plurality of sealing walls adhered to one surface of the first substrate configured to enclose each of the electronic circuit devices. Morishima teach a bonding method which includes the steps of forming sealing walls 2a and 2b to

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enclose the electronic device. Morishima discloses that insulating sealing walls 2a and 2b protect the electronic device from being inadvertently damaged during the bonding process, see column 2, paragraphs [0032] and [0033]. It would have been obvious to one skilled in the art to form sealing walls surrounding the electronic component in the known method of Mizuno et al. in order to protect the electronic component from being damaged during the bonding step.

Allowable Subject Matter

Claims 14 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 13-20 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication should be directed to Mary Wilczewski at telephone number (703) 308-2771.

M. Wilczewski Primary Examiner Tech Center 2800